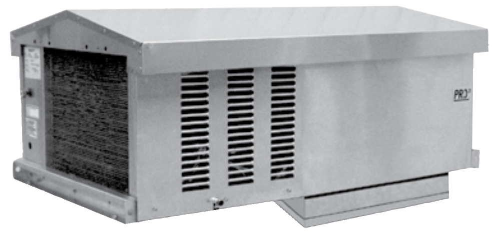
CH-PTMTB
January 2008
Replaces CH-PROTB, 08/07






CHANDLER
REFRIGERATION




PRO^3 TOP MOUNT
Packaged Refrigeration System

Technical Guide

Model PTN and PTT
For Indoor and Outdoor Applications

PRO^3™ Top Mount

TABLE OF CONTENTS

NSF c UL us MEA Accepted

Energy Solutions®

We have made a commitment to customer needs, innovation and environmental stewardship and have dedicated ourselves to delivering energy-efficient choices that reduce costs, improve bottom lines and enhance equipment performance and service life. Look for the Energy Solutions® logo to identify other products and options that can help you save money and energy.

NOMENCLATURE

P	T		N		072		H		2		B		H	
PRODUCT LINE	DESIGN ORIENTATION		APPLICATION LOCATION		NOMINAL CAPACITY		TEMPERATURE RANGE		REFRIGERANT TYPE		VOLTAGE		MOTOR	
PRO³ Packaged Refrigeration System	T	Top Mount	N	Indoor	#	BTUH x 100	H	High/ Medium Temp	2	R-22	A	115/1/60	H	PSC motors (on evaporator and condensing unit sections)
			T	Outdoor			L	Low Temp	6	R-404A	B	208-230/1/60	E	EC motors (on evaporator section w/ PSC motors on condensing units section)
											C	208-230/3/60	No H or E	Shaded Pole motors (on evaporator and condensing unit sections)

The PRO³ Top Mount packaged refrigeration systems combine evaporator and condensing unit into one unit — simplifying installation and reducing refrigerant charge, which saves time, money and energy. Not only that, it's environmentally friendly.

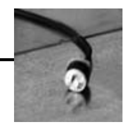
The PRO³ Top Mount is designed to maximize storage area inside a cooler or freezer and is ideal for small- to medium-sized restaurant and convenience store applications where holding temperature is the primary goal.

If greater pull-down capacity is required, see the PRO³ Side Mount packaged refrigeration system (model PST).

EASE OF INSTALLATION AND SERVICE

- **Installation takes a fraction of the time required for a split system:** no piping or loose components to install, refrigerant is pre-charged at factory and a field superheat adjustment is not required *(see installation manual for more information)*
- **No drain line required:** indoor models come with a condensate evaporation pan
- **Flexible design allows for multiple installation methods:** optimized for indoor use, but outdoor models available with weatherhood installed. Outdoor models also come with: crankcase heater, drain line heater and fan-cycling for head pressure control
- **Maximizes storage area in a cooler or freezer:** evaporator grill mounts flush on a standard 4" or a recessed 5 1/2" ceiling panel





Most indoor PRO³ Top Mount systems come standard with a 26" power cord and 3-prong electrical plug for quick installation and start-up which may eliminate the need for a field installed disconnect. See the data tables in this brochure for electrical receptacle specifications.

EASE OF USE

- System is factory-assembled, evacuated, charged, run-tested and wired; no additional components or refrigerant charging required; most models come with a 26" power cord ready to plug-in
- Controls preset for typical applications: +35° F for coolers, -10° F, for freezers and are easy to adjust (019L6 set for 0° F)



The PRO³ Top Mount evaporator grill sits flush in a standard 4" thick ceiling panel.

ENERGY EFFICIENT | ENVIRONMENTALLY FRIENDLY

- **Energy Solutions® energy-efficient motors from InterLink™ Commercial Refrigeration Parts:**
  - PSC motors optional in both condensing unit and evaporator section
  - EC motors optional in evaporator section only
- **Reduced refrigerant charge:** system uses approximately 10 percent* of refrigerant required for a comparable split system

RELIABLE | DURABLE

- System is fully-assembled and quality-tested at the factory
- Electronic control provides accurate temperature control
- Liquid-line filter drier (medium and large cabinet only)
- Two-year parts warranty



MEA Accepted

PRO³ Top Mount systems are UL-listed in the United States and Canada

** Results may vary. Estimate based on a typical 25-foot refrigerant line length.*

NEW EC MOTORS FOR PRO³ PACKAGED REFRIGERATION SYSTEMS

Introducing the most-energy efficient motor available for packaged refrigeration systems. Choosing energy-efficient motors for your packaged systems can provide significant energy savings and lower operational costs. Additionally, because these motors can help reduce heat load (and system run-time), they can improve the reliability and longevity of refrigeration equipment.

Electronically Commutated (EC) motors even further improve energy efficiency and equipment reliability. EC motors by InterLink™ are up to 75% efficient – that's a 51-59% increase over shaded pole motors and a 30-35% increase over PSC motors. As with PSC motors, you save money both directly from a decrease in motor watts and also from a reduction of heat gain into the refrigerated space.

Permanent Split Capacitor (PSC) motors can significantly lower your energy costs. PSC motors average 30-35% higher efficiency than shaded pole motors and offer dual energy savings by reducing motor watts and heat gain into the refrigerated space.

Energy Savings (annual)†				
	Model	EC vs Shaded Pole Motors	EC vs PSC Motors	PSC vs Shaded Pole Motors
High Temperature Units	P*N024H2	*$42*	*$13*	*$29*
	P*N029H2	*$42*	*$13*	*$29*
	P*N040H2	*$42*	*$13*	*$29*
	P*N047H2	*$71*	*$23 - $32*	*$39 - $48*
	P*N063H2	*$131*	*$65*	*$66*
	P*N072H2	*$131*	*$65*	*$66*
	P*N099H2	*$202*	*$97*	*$105*
	P*N128H2	*$202*	*$97*	*$105*
Low Temperature Units	P*N019L6	*$40*	*$13*	*$27*
	P*N021L6	*$67*	*$18 - 30*	*$37 - $46*
	P*N031L6	*$123*	*$60*	*$63*
	P*N044L6	*$123*	*$60*	*$63*
	P*N052L6	*$190*	*$91*	*$99*
	P*N069L6	*$190*	*$91*	*$99*

† Savings are calculated using a cost of $.09/kWh

* T For Outdoor, N for Indoor.



Energy Solutions

Model PTN/PTT High/Medium Temperature | Air Defrost | Cooler Application

Model	80° F Ambient		90° F Ambient		95° F Ambient		100° F Ambient		110° F Ambient	
	Box Temperature									
	35° F	38° F	35° F	38° F	35° F	38° F	35° F	38° F	35° F	38° F
PTN024H2	2,800	2,920	2,630	2,740	2,540	2,650	2,460	2,570	N/A	N/A
PTN029H2	3,380	3,500	3,170	3,290	3,070	3,180	2,980	3,090	N/A	N/A
PTN040H2	4,660	4,790	4,380	4,500	4,240	4,350	4,110	4,220	N/A	N/A
PT*047H2	5,480	5,830	5,150	5,480	4,980	5,300	4,830	5,140	4,250	4,520
PT*063H2	7,350	7,800	6,910	7,340	6,680	7,100	6,480	6,890	5,700	6,060
PT*072H2	8,400	8,870	7,890	8,330	7,630	8,060	7,400	7,820	6,510	6,880
PT*099H2	11,540	12,470	10,850	11,730	10,490	11,340	10,180	11,000	8,960	9,680
PT*128H2	14,930	15,970	14,030	15,010	13,570	14,520	13,160	14,080	11,580	12,390

***T For Outdoor, N for Indoor.**

Model PTN/PTT Low Temperature | Electric Defrost | Freezer Application

Model	80° F Ambient			90° F Ambient			95° F Ambient			100° F Ambient			110° F Ambient		
	Box Temperature														
	0° F	-10° F	-20° F	0° F	-10° F	-20° F	0° F	-10° F	-20° F	0° F	-10° F	-20° F	0° F	-10° F	-20° F
PTN019L6	2,960	N/A	N/A	2,640	N/A	N/A	2,470	N/A	N/A	2,270	N/A	N/A	1,910	N/A	N/A
PT*021L6	3,220	2,590	1,610	2,860	2,300	1,430	2,680	2,160	1,340	2,470	1,990	1,230	2,080	1,670	1,030
PT*031L6	5,060	3,830	2,470	4,500	3,400	2,200	4,220	3,190	2,060	3,880	2,940	1,900	3,260	2,470	1,600
PT*044L6	7,040	5,440	4,080	6,260	4,830	3,630	5,870	4,530	3,400	5,400	4,170	3,130	4,540	3,500	2,630
PT*052L6	8,400	6,430	4,690	7,470	5,720	4,170	7,000	5,360	3,910	6,440	4,930	3,600	5,410	4,140	3,020
PT*069L6	10,870	8,520	6,300	9,670	7,850	5,600	9,060	7,100	5,250	8,340	6,530	4,830	7,010	5,490	4,060

***T For Outdoor, N for Indoor.**

Model PTN/PTT Electrical Data | Specifications | All Models

Model	Voltage	MCA	MOPD	Unit Amps	Evaporator CFM	Plug Supplied	Matching NEMA Receptacle	Dimensions Figure[1]	Approximate Net Weight	
									lbs.	kg
PTN024H2A	115/1/60	10.2	15	10.2	340	Yes	5-20R	A	88	40
PTN029H2A	115/1/60	10.6	15	10.6	340	Yes	5-20R	A	90	41
PTN040H2A	115/1/60	11.7	15	11.7	340	Yes	5-20R	A	92	42
PT*047H2A	115/1/60	16.9	20	14.2	350	Yes	5-20R	B	192	87
PT*047H2B	208-230/1/60	8.6	15	7.3	350	Yes [2]	6-15R	B	192	87
PT*063H2B	208-230/1/60	11.6	15	9.9	550	Yes [2]	6-15R	B	207	94
PT*072H2B	208-230/1/60	10.9	15	9.3	500	Yes [2]	6-15R	B	211	95
PT*099H2B	208-230/1/60	17.1	20	14.7	875	Yes [2]	6-20R	C	270	122
PT*099H2C	208-230/3/60	15.4	20	13.3	875	No		C	265	120
PT*128H2B	208-230/1/60	20.3	30	17.2	825	No		C	290	132
PT*128H2C	208-230/3/60	14.8	20	12.8	825	No		C	285	129
PTN019L6A	115/1/60	13.0	20	13.0	340	Yes	5-20R	A	101	46
PT*021L6A	115/1/60	14.5	20	12.3	350	Yes	5-20R	B	213	97
PT*021L6B	208-230/1/60	7.6	15	6.5	350	Yes [2]	6-15R	B	213	97
PT*031L6B	208-230/1/60	13.8	15	11.6	550	Yes [2]	6-15R	B	221	100
PT*044L6B	208-230/1/60	15.9	20	13.3	520	Yes [2]	6-20R	B	225	102
PT*052L6B	208-230/1/60	18.1	20	15.3	900	Yes [2]	6-20R	C	275	125
PT*052L6C	208-230/3/60	12.2	15	13.0	900	No		C	270	122
PT*069L6B	208-230/1/60	23.8	30	20.0	875	No		C	280	127
PT*069L6C	208-230/3/60	15.9	20	14.2	875	No		C	275	125

***T For Outdoor, N for Indoor. [2] Plug Supplied on Indoor models only. [1] See dimensions page 6.**

DIMENSIONS

Figure A Small Cabinet Design (indoor only)

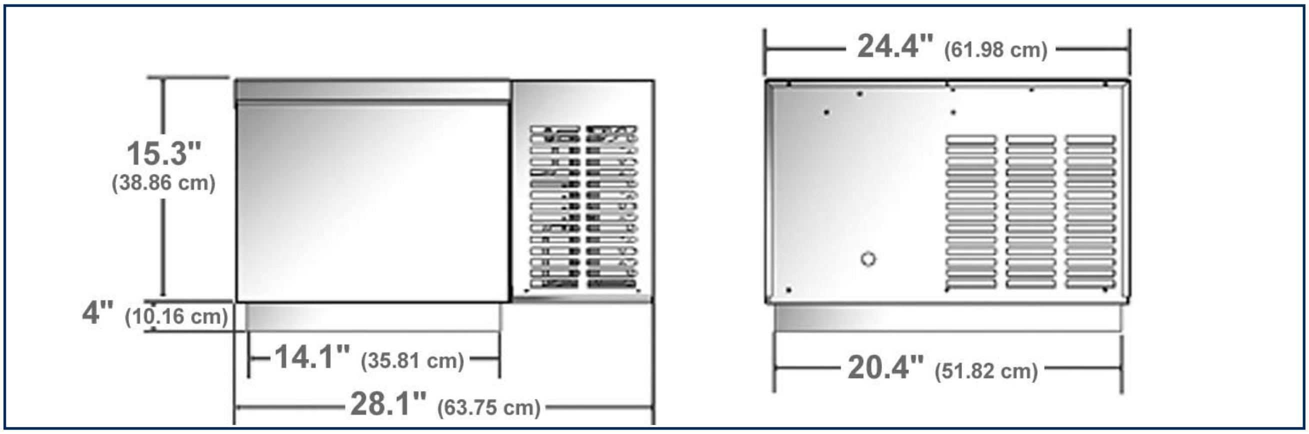
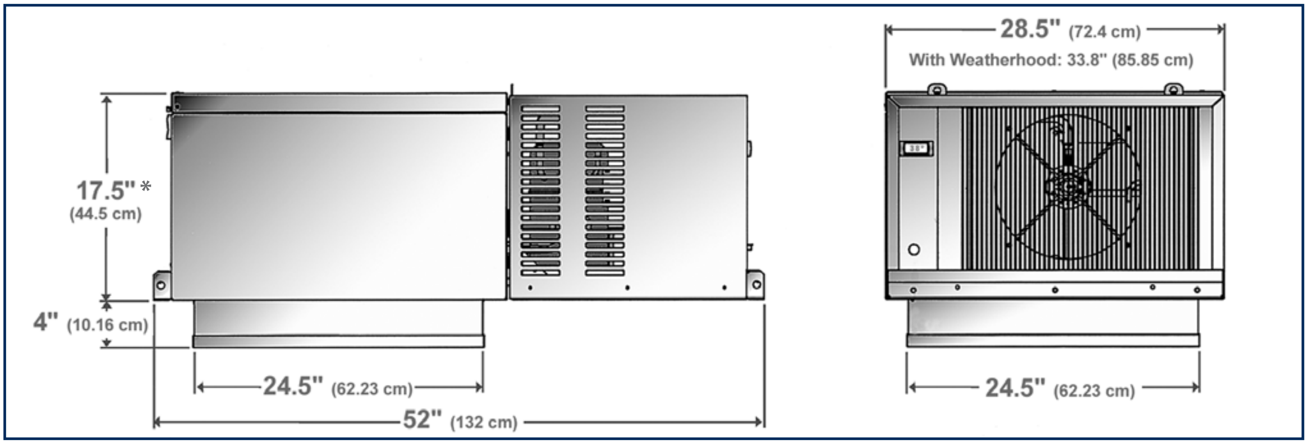
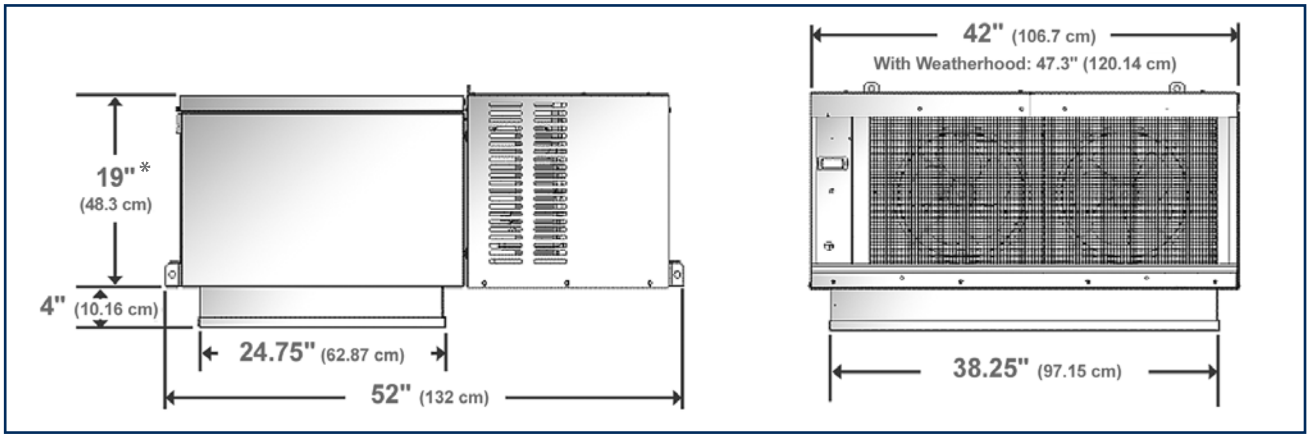


Figure B Medium Cabinet Design

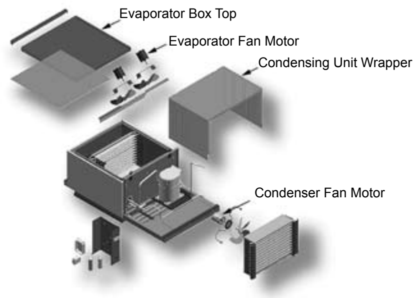


***- 21.5" (54.61 cm) on outdoor models with weatherhood**

Figure C Large Cabinet Design



***- 23.5" (59.69 cm) on outdoor models with weatherhood**



REPLACEMENT PARTS

Right source. Right parts. Right now.

InterLink is your link to a complete line of dependable and certified commercial refrigeration parts, accessories and innovative electronic controls for all Chandler equipment. At InterLink, we provide our wholesalers with a comprehensive selection of product solutions and innovative technologies for the installed customer base. And every product is built to ensure the same high performance standards with which all Chandler brands are built — backed by a dedicated team to serve every customer need, delivering at the best lead times in the industry.

Dependable. Versatile. Courteous.

Finally, one simple source for all your replacement needs from a name you can trust.

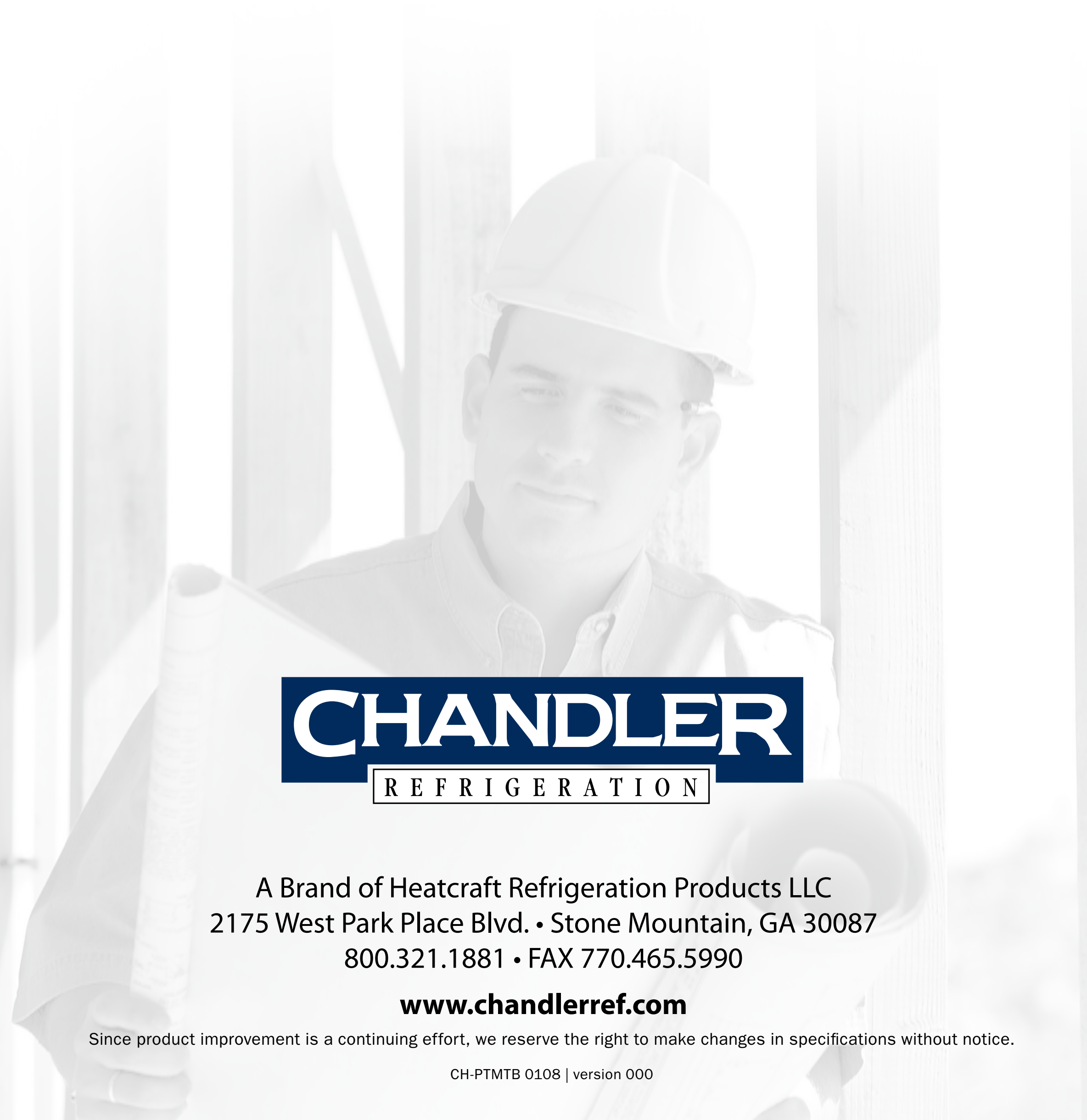
InterLINK™ Commercial Refrigeration Parts

	Part Description	Part #	Indoor Models																				Outdoor Models													
			Coolers											Freezers									Coolers							Freezers						
			PTN024H2A	PTN029H2A	PTN040H2A	PTN047H2A	PTN047H2B	PTN063H2B	PTN072H2B	PTN099H2B	PTN099H2C	PTN128H2B	PTN128H2C	PTN019L6A	PTN021L6A	PTN021L6B	PTN031L6B	PTN044L6B	PTN052L6B	PTN052L6C	PTN069L6B	PTN069L6C	PTT047H2B	PTT063H2B	PTT072H2B	PTT099H2B	PTT099H2C	PTT128H2B	PTT128H2C	PTT021L6B	PTT031L6B	PTT044L6B	PTT052L6B	PTT052L6C	PTT069L6B	PTT069L6C
Fan Blades	Evaporator	22901901				1	1	2	2	3	3	3	3		1	1	2	2	3	3	3	3	1	2	2	3	3	3	3	1	2	2	3	3	3	3
	Evaporator	23100501	1	1	1									1																						
	Condenser	22900701				1	1	1	1	2	2	2	2		1	1	1	1	2	2	2	2	1	1	1	2	2	2	2	1	1	1	2	2	2	2
	Condenser	22900601	1	1	1									1																						
Fan Motors	Evaporator (208/230V)	25307801**					1	2	2	3	3	3	3			1	2	2	3	3	3	3	1	2	2	3	3	3	3	1	2	2	3	3	3	3
	Evaporator (115V)	25307701				1									1																					
	Evaporator (115V)	25303201	1	1	1									1																						
	Condenser (208/230V)	25307801					1	1	1	2	2	2	2			1	1	1	2	2	2	2	1	1	1	2	2	2	2	1	1	1	2	2	2	2
	Condenser (115V)	25307701				1									1																					
	Condenser (115V)	25300101	1	1	1									1																						
	Evap Fan Motor Bracket	4000104				1	1	2	2	3	3	3	3		1	1	2	2	3	3	3	3	1	2	2	3	3	3	3	1	2	2	3	3	3	3
	Evap Fan Motor Bracket	23101401	1	1	1									1																						
	Cond Fan Motor Bracket	23103301				1	1	1	1	2	2	2	2		1	1	1	1	2	2	2	2	1	1	1	2	2	2	2	1	1	1	2	2	2	2
	Cond Fan Motor Bracket	23101101	1	1	1									1																						
Contactors	25A, 208-240V	2259996									1		1							1		1					1		1					1		1
	20A, 115V	2254303				1									1																					
	20A, 230V	034915200					1	1	1	1		1				1	1	1	1		1		1	1	1	1		1		1	1	1	1		1	
Temperature Control	Freezer Defrost/Temp Control	21300401													1	1	1	1	1	1	1	1														
	Temp Control Freezer (115V)	28916501												1																						
	Temp Control Cooler (208/230V)	28916201					1	1	1	1	1	1	1																							
	Temp Control Cooler (115V)	28916301	1	1	1	1																														
	Freezer Sensor	28912101													2	2	2	2	2	2	2	2														
	Cooler Sensor (Coil)	28916202	1	1	1	1	1	1	1	1	1	1	1																							
	Cooler Sensor (Room)	28916203	1	1	1	1	1	1	1	1	1	1	1																							
	Heater Limit Thermostat	5708L												1	1	1	1	1	1	1	1	1								1	1	1	1	1	1	1
	Defrost Timer	21300601												1																						
	Freezer Defrost/Temp Control Kit* (208/230V)	89814701																												1	1	1	1	1	1	1
	Temp Control Cooler Kit* (208/230V)	89814601																					1	1	1	1	1	1	1							
Defrost Heaters	Defrost Heaters (115V)	24751901												1																						
	Defrost Heaters (115V)	24712101													3																					
	Defrost Heaters (230V)	4312F														3	3	3												3	3	3				
	Defrost Heaters (230V)	4313F																	3	3	3	3											3	3	3	3
Outdoor Parts	Fan Pressure Control	28917301																					1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fan Temp. Control	5521R																								1	1	1	1				1	1	1	1
	Drain Line Heater	24753401																					1	1	1											
	Drain Line Heater T'stat	28917401																					1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Weatherhood Medium	50047901																					1	1	1					1	1	1				
	Weatherhood Large	50047801																								1	1	1	1				1	1	1	1

*Kits include control, sensors, mounting hardware and instructions.

**PSC motor option (H designation on end of model name): part 25307801=25308601, part 25307701=25308501, part 25303201=25399201, part 25300101=25308501. Contact InterLink Parts at 800-686-7278.

For more information on Chandler products, contact your Chandler Sales Representative or visit us at www.chandlerref.com.



A Brand of Heatcraft Refrigeration Products LLC
2175 West Park Place Blvd. • Stone Mountain, GA 30087
800.321.1881 • FAX 770.465.5990

www.chandlerref.com

CH-PTMTB 0108 | version 000